

SUSTAINING SUCCESS

Envisioning Knoxville's Future
Sustainability Leadership



80% x 2050
reduction in
eCO₂

50% x 2030
reduction in
eCO₂

20% x 2020
reduction in
eCO₂

Building Sustainable Leadership

For over a decade, the City of Knoxville has worked to make Knoxville a greener, more sustainable city – one where the economy, environment, and community can thrive today and in the future. Thanks to our forward-looking, pragmatic, and effective approach, Knoxville is a **regional and national sustainability leader**. We've saved money through efficient City operations, improved infrastructure for folks who bike, walk, or use public transit, increased renewable energy capacity, and invested in energy efficiency for our homes and

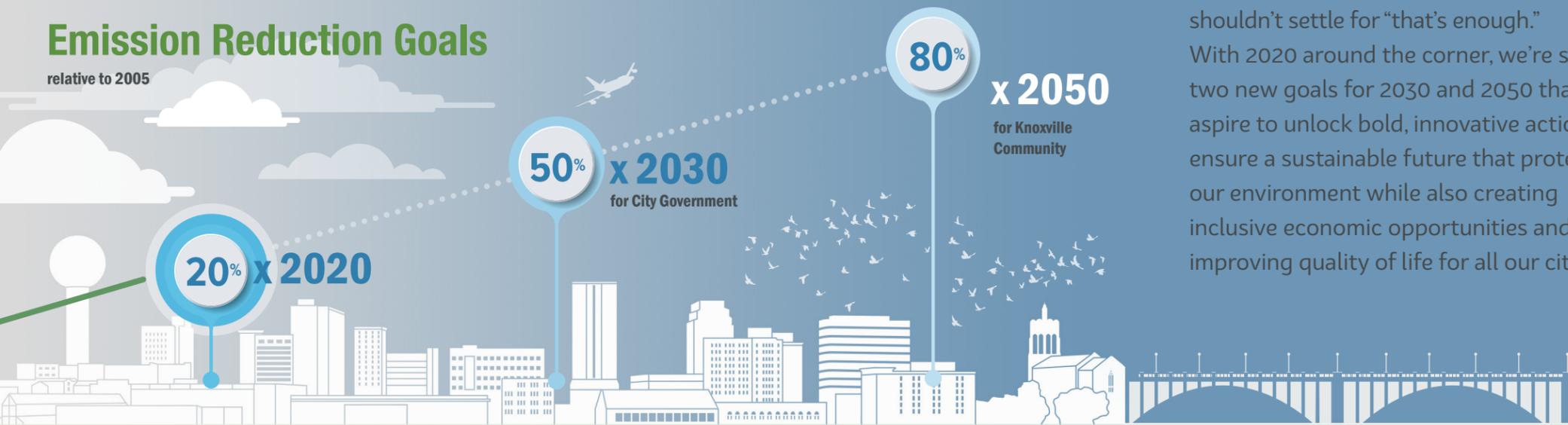
businesses. Jobs in energy and advanced technology sectors are strengthening our region's economy. We've shown that when we advance sustainability, we make Knoxville an even greater city.

Our Progress

In 2008, the City of Knoxville set a goal to reduce greenhouse gas emissions **20% by 2020** relative to 2005 levels for both municipal operations and the Knoxville community. **We're on track to exceed our municipal goal**, and community emissions are lower in the midst of a growing economy and improving quality of life for our residents.

Emission Reduction Goals

relative to 2005



City Government Leads by Example: 50% by 2030

Emissions associated with City operations are down 15% relative to 2005, and we're on track to exceed 20% with the completion of our LED streetlight retrofit. We've reduced emissions while saving taxpayer dollars and maintaining the quality services our residents expect. Our new goal is ambitious but realistic. With steady leadership, the City can make **smart, fiscally-responsible investments in new, cost-competitive technologies and operational innovations** that achieve deep emission reductions while maintaining high quality services.



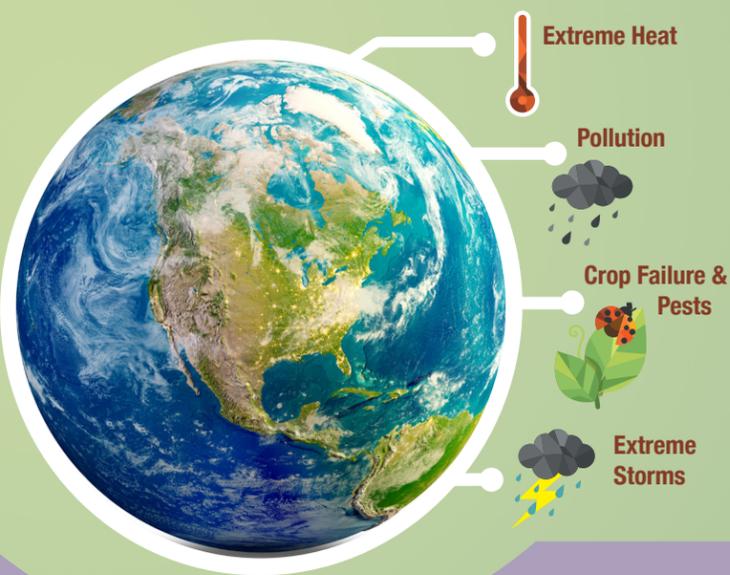
Solar panels on top of the Knoxville Convention Center

Knoxville is a leader, and leaders always move forward.

We are proud of our progress, but Knoxville shouldn't settle for "that's enough." With 2020 around the corner, we're setting two new goals for 2030 and 2050 that aspire to unlock bold, innovative action to ensure a sustainable future that protects our environment while also creating inclusive economic opportunities and improving quality of life for all our citizens.

How Might the City Achieve Our 2030 Goal?

- Aggressively phase-in electric, hybrid, and alternative-fuel City fleet and transit vehicles.
- Achieve deeper energy savings in City facilities through strategic investment in high-efficiency equipment and improved operations.
- Ratify municipal green building policy to maximize the efficiency of new City facilities.
- Invest in cost-competitive renewable energy to serve City energy needs.



Being a Sustainable Community Means Addressing Climate Change

Climate change is intensifying many challenges we already face in Knoxville, like extreme heat, extreme storms, localized flooding, air pollution, and pests to people and crops. It threatens our property, our wallets, our health, and places we love, like the Great Smoky Mountains National Park. Across the world, millions of lives are at risk. **Experts agree: this big challenge calls for bold leadership** to protect our children and grandchildren from the worst effects of climate change and prepare local communities to deal with impacts they already face.

The High Cost of Increased Flooding

Flooding in February 2019 caused an estimated \$43.5M in damage to Knox County homes, businesses, and public infrastructure. Climate change is expected to increase the frequency of extreme rain events in Knoxville, which would put residents at increased risk of flood damage.

Right: Flooding at the intersection of Cedar Bluff Road and Parkwest Blvd.

Photo credit: Knoxville News Sentinel



Aspiring for Deep Community Progress: 80% by 2050

The Knoxville community's greenhouse gas emissions are down 11% from 2005 levels, even while population, economic activity, and property values have increased over the last decade. We know that responsible environmental practices can go hand in hand with economic development and an improved, more equitable quality of life. Reducing emissions 80% by 2050 is a bold aspirational goal that requires changes to technology markets and energy systems – most of which are outside City government control. **But, the City is an agent of change**, and by setting our compass toward a dramatically lower-carbon future, we aim to motivate cross-sector leadership from many partners to ensure Knoxville remains a great place for all residents to call home for generations to come.

As a Community, We'll Need to:

- Ensure new buildings reflect modern, high-efficiency building technologies, techniques, and best practice.
- Motivate and facilitate deep energy efficiency improvements in local homes and buildings.
- Generate more electricity from renewable and low-carbon sources, and create new pathways for local residents and businesses to purchase affordable, renewable electricity.
- Improve the coverage, connectivity, and convenience of public transit, bicycle and pedestrian facilities to enhance transportation options for people who live and commute to work in Knoxville.
- Promote the strategic deployment of electric and autonomous vehicles.
- Preserve and expand Knoxville's tree canopy.

A Growing Legacy of Leadership



Knoxville recognized as
one of 25 international finalists for a 2017 C40
Cities Bloomberg Philanthropies Award



Mayor Rogero named
co-chair to national Climate Mayors network

2017



Knoxville designated
National Wildlife Federation Certified Wildlife
Community (the first municipal certification in
Tennessee)

City of Knoxville designated
a "Best Workplaces for Commuters"

2015



TVA awards Knoxville
\$15 million for the Knoxville Extreme
Energy Makeover Program



Knoxville named
one of 16 Climate Action Champions by the
White House and Department of Energy

2014



Knoxville awarded
Platinum Certification in TVA's "Valley
Sustainable Communities" program

Mayor Rogero appointed
to White House State, Local, and
Tribal Leaders Task Force on Climate
Preparedness & Resilience

2013



Knoxville wins
IBM Smarter Cities Challenge grant and
launches the Smarter Cities Partnership to
improve home comfort, quality, and
affordability through energy efficiency



2012



**Mayor Rogero establishes
Office of Sustainability**

Knoxville Convention Center
becomes first convention center in the state
to achieve LEED certification

2012



2011



Knoxville Sustainability
staff co-founds the
Southeast Sustainability
Director's Network

City releases
the first Energy &
Sustainability
Work Plan

2010



2008



Knoxville
selected as one of 25 DOE
Solar America Cities

Mayor Haslam
appoints the City's first
Energy & Sustainability
Task Force

2007

